

Application No. 10/811537
Page 2

Amendment
Attorney Docket No. B94.2R-11495-US01

Amendments To The Claims:

- 1) (Currently amended) A muzzle brake comprising:
a body having a first end, a second end, an internal plenum space and a plurality of vent slots, each vent slot having a planar axis, each vent slot having an aperture in communication with the internal plenum space, the internal plenum space comprising an elongate projectile path plenum having a central longitudinal axis and a plurality of enlarged serial plenums; and
a tubular cover arranged to overlay at least a portion of the body, the tubular cover having at least one side port in communication with at least one vent slot.
- 2) (Original) The muzzle brake of claim 1, wherein a central longitudinal axis of each enlarged serial plenum lies along the central longitudinal axis of the elongate projectile path plenum.
- 3) (Original) The muzzle brake of claim 1, wherein the aperture of each vent slot is in communication with an enlarged serial plenum.
- 4) (Currently amended) The muzzle brake of claim 1, wherein each of said enlarged serial plenums has a constant diameter along its length ~~wherein each vent slot is oriented at a non-zero orientation angle to the central longitudinal axis of the elongate projectile path plenum.~~
- 5) (Currently amended) The muzzle brake of claim ~~[[4]]~~ 1, wherein each vent slot is oriented at a non-zero orientation angle to the central longitudinal axis of the elongate projectile path plenum, and wherein the orientation angle of a vent slot increases from the muzzle brake first end to the muzzle brake second end.
- 6) (Currently amended) The muzzle brake of claim ~~[[4]]~~ 1, wherein each vent slot is oriented at a non-zero orientation angle to the central longitudinal axis of the elongate projectile path plenum, and wherein the orientation angle of a vent slot decreases from the muzzle brake first end to the muzzle brake second end.
- 7) (Currently amended) The muzzle brake of claim ~~[[1]]~~ 17, wherein a depth dimension of each vent slot increases from the muzzle brake first end to the muzzle brake second end.
- 8) (Original) The muzzle brake of claim 1, wherein the tubular cover is fixedly attached to the body.
- 9) (Original) The muzzle brake of claim 1, wherein the side port in the tubular cover increases in size from a first end to a second end.

Application No. 10/811537
Page 3

Amendment
Attorney Docket No. B94.2R-11495-US01

10) (Original) The muzzle brake of claim 1, wherein at least one vent slot is provided for each enlarged serial plenum.

11) (Currently amended) The muzzle brake of claim [[9]] 1, wherein the area of each vent slot aperture in communication with an enlarged serial plenum increases from the muzzle brake first end to the muzzle brake second end.

12) (Original) The muzzle brake of claim 1, further comprising a first group of vent slots and a second group of vent slots, each group of vent slots having at least one vent slot in communication with each enlarged serial plenum.

13) (Original) The muzzle brake of claim 12, wherein a vent slot of the first group of vent slots that is in communication with a first enlarged serial plenum comprises a mirror image of a vent slot of the second group of vent slots that is in communication with the first enlarged serial plenum.

14) (Original) The muzzle brake of claim 12, wherein the cover comprises a first side port and a second side port, the first side port in communication with at least one vent slot of the first group of vent slots, the second side port in communication with at least one vent slot of the second group of vent slots.

15) (Currently amended) A muzzle brake comprising:

a body having a first end, a second end, an internal plenum space and a plurality of vent slots, each vent slot having an aperture in communication with the internal plenum space, the internal plenum space comprising an elongate projectile path plenum having a central longitudinal axis and a plurality of enlarged serial plenums; and

a tubular cover arranged to overlay at least a portion of the body, the tubular cover having at least one side port in communication with at least one vent slot;

~~The muzzle brake of claim 1, wherein at least one vent slot further comprises a first side and a second side, the first side being nonparallel to the second side.~~

16) (Currently amended) The muzzle brake of claim [[1]] 17, wherein each vent slot passes through the entire height dimension of the body in the area of the vent slot at least one vent slot further comprises a first side having curvature and a second side having curvature.

17) (Currently amended) A muzzle brake comprising:

Application No. 10/811537
Page 4

Amendment
Attorney Docket No. B94.2R-11495-US01

a body having a central longitudinal axis, a first end having an entrance aperture, a second end having an exit aperture, an internal plenum space and a plurality of vent slots ~~including a first vent slot and a second vent slot~~, each vent slot raked toward said first end, each vent slot having a planar axis oriented at a non-zero acute orientation angle with respect to the central longitudinal axis of the body, each vent slot having an aperture in communication with the internal plenum space; and

a tubular cover arranged to overlay at least a portion of the body, the tubular cover having at least one side port in communication with at least one vent slot;

~~wherein the orientation angle of the first vent slot is different than the orientation angle of the second vent slot.~~

18) (Currently amended) The muzzle brake of claim 17, wherein the orientation angle of each vent slot planar axis increases from the muzzle brake first end to the muzzle brake second end.

19) (Currently amended) The muzzle brake of claim 17, wherein the orientation angle of each vent slot planar axis decreases from the muzzle brake first end to the muzzle brake second end.

20) (Original) The muzzle brake of claim 17, wherein the area of each vent slot aperture in communication with the plenum space increases from the muzzle brake first end to the muzzle brake second end.

21) (Currently amended) A muzzle brake comprising:

a body comprising an internal plenum space, an entrance aperture, an exit aperture, a first group of vent slots and a second group of vent slots, each vent slot having an aperture in communication with the internal plenum space; and

a tubular cover comprising a wall portion, a first side port and a second side port;

wherein the tubular cover is arranged to overlay at least a portion of the body such that at least a portion of each vent slot is covered by the wall portion of the tubular cover, the wall portion of the tubular cover abuts an area of the body located between vent slots, at least a portion of each vent slot of the first group of vent slots is in communication with the first side port of the tubular cover, and at least a portion of each vent slot of the second group of vent slots is in communication with the second side port of the tubular cover.

Application No. 10/811537
Page 5

Amendment
Attorney Docket No. B94.2R-11495-US01

22. (New) The muzzle brake of claim 1, wherein the planar axis of a vent slot includes curvature.